

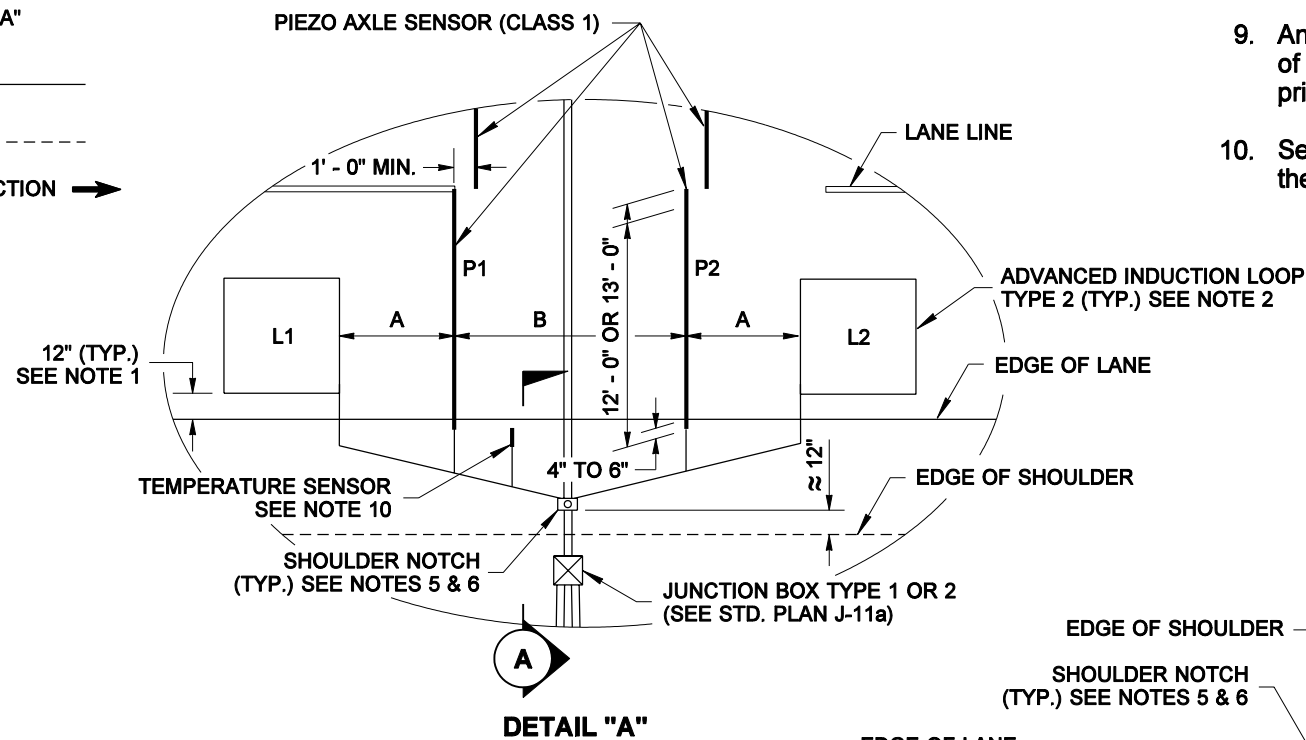
PLAN VIEW

**INDUCTION LOOP / PIEZO AXLE SENSOR
NUMBER IDENTIFICATION**

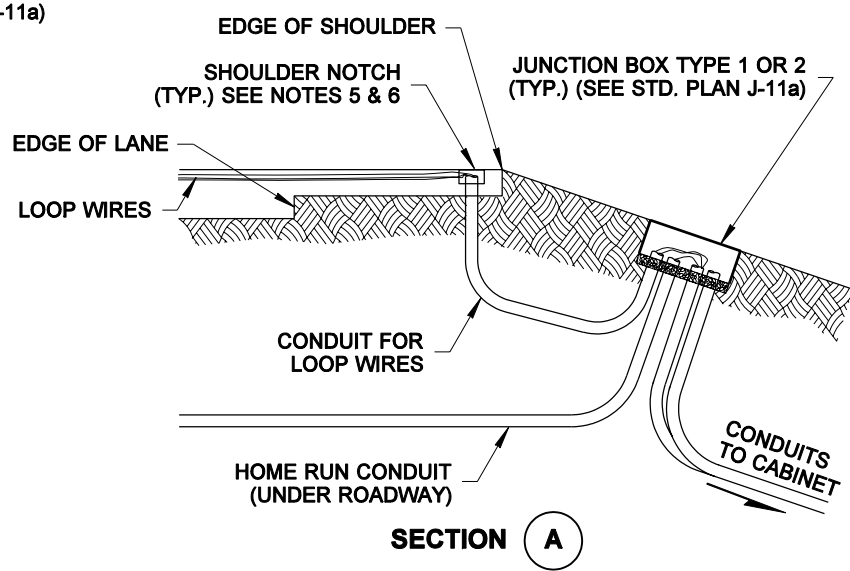
- Lane 1 - (drive lane) ~ Loop L1, Piezo P1, Piezo P2, Loop L2
- Lane 2 - (pass lane) ~ Loop L3, Piezo P3, Piezo P4, Loop L4
- Lane 3 - (drive lane) ~ Loop L1, Piezo P1, Piezo P2, Loop L2
- Lane 4 - (drive lane) ~ Loop L3, Piezo P3, Piezo P4, Loop L4
- Lane 5 - (pass lane) ~ Loop L5, Piezo P5, Piezo P6, Loop L6

TYPICAL 5 LANE FREEWAY WITH MEDIAN

| INDUCTION LOOP TO PIEZO AXLE SPACING | | |
|---|----|-----|
| | A | B |
| RURAL | 6' | 12' |
| URBAN | 2' | 10' |



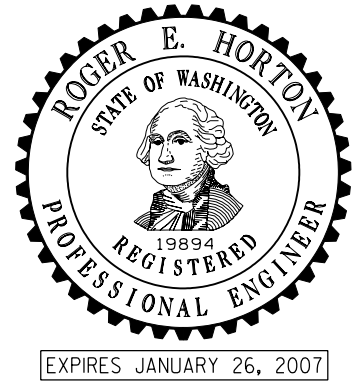
DETAIL "A"



SECTION A

NOTES

- The Traffic Data Collection Loops shall be centered inside lanes without an adjacent shoulder; the loops in lanes adjacent to shoulders, including the median shoulder, shall be located 12" from the edge of lane, see Detail "A".
- Type 3 Advanced Induction Loops may also be used, see Standard Plan J-8b.
- The loops and axle sensors shall be cut in the final lift of asphalt.
- For concrete pavement lanes with asphalt shoulders, install all of the Piezo sensor and splice in the concrete lane. Also for concrete pavement lanes install the loops 4" to 6" away from the expansion joints.
- The shoulder notch length along the roadway shall be 4" or the conduit size plus 2", whichever is larger. The shoulder notch width perpendicular to the roadway shall be the conduit size plus 1/4".
- After all the wire leads are installed, seal the end of the conduit with Conduit Sealant. See the Special Provisions in the contract for the material used to fill the notch in the shoulder, or use an asphalt cold-patch.
- Use Schedule 40 PVC conduit from the junction box to the cabinet. When there are four or more total lanes, use one conduit for each direction of travel. See Standard Specification 8-20 for conduit installation.
- Use Schedule 80 PVC, HDPE, or steel conduit under the roadway. See Standard Specification 8-20 for conduit installation.
- An inspector from the Traffic Data Office (TDO) shall be on site during all phases of the Traffic Recorder installation. The Contractor shall alert the Engineer 10 days prior to the beginning of any installation activity.
- See Standard Plan J-20 for Piezo Axle Sensor General installation instructions. See the Special Provisions in the contract for Temperature Sensor installation instructions.



**WEIGH-IN-MOTION
SITE INSTALLATION
STANDARD PLAN J-19**

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Harold J. Peterfeso 09-02-05
STATE DESIGN ENGINEER DATE



NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT BUT AN ELECTRONIC DUPLICATE. THE ORIGINAL, SIGNED BY THE ENGINEER AND APPROVED FOR PUBLICATION, IS KEPT ON FILE AT THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION. A COPY MAY BE OBTAINED UPON REQUEST.

DRAWN BY: MONIQUE GLICK